A Recurrent Neural Network for Closed-Loop Intracortical Brain-Machine Interface Decoders Supplemental Materials

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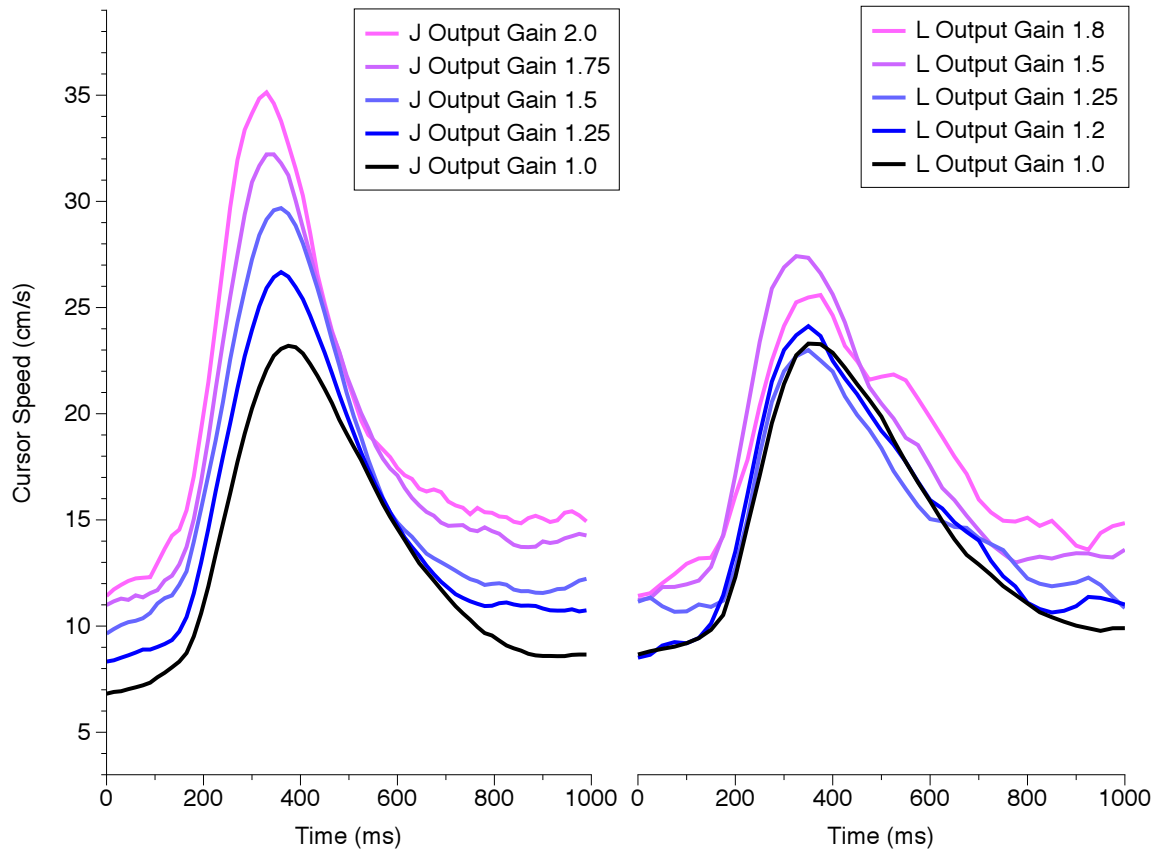[6]Palo Alto Medical Foundation
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Figure 1: Mean Cursor Speed for the VKF as the Output Gain Varies. Left panel - the mean cursor speed (cm/s) across trials, the magnitude of the velocity of the cursor, for monkey J after target onset for output gain values of 1.0, 1.25, 1.5, 1.75, and 2.0. The mean cursor speed increases with increased kalman output gain. Right panel - same as left panel, but for monkey L with output gain values of 1.0, 1.2, 1.25, 1.5, and 1.8.
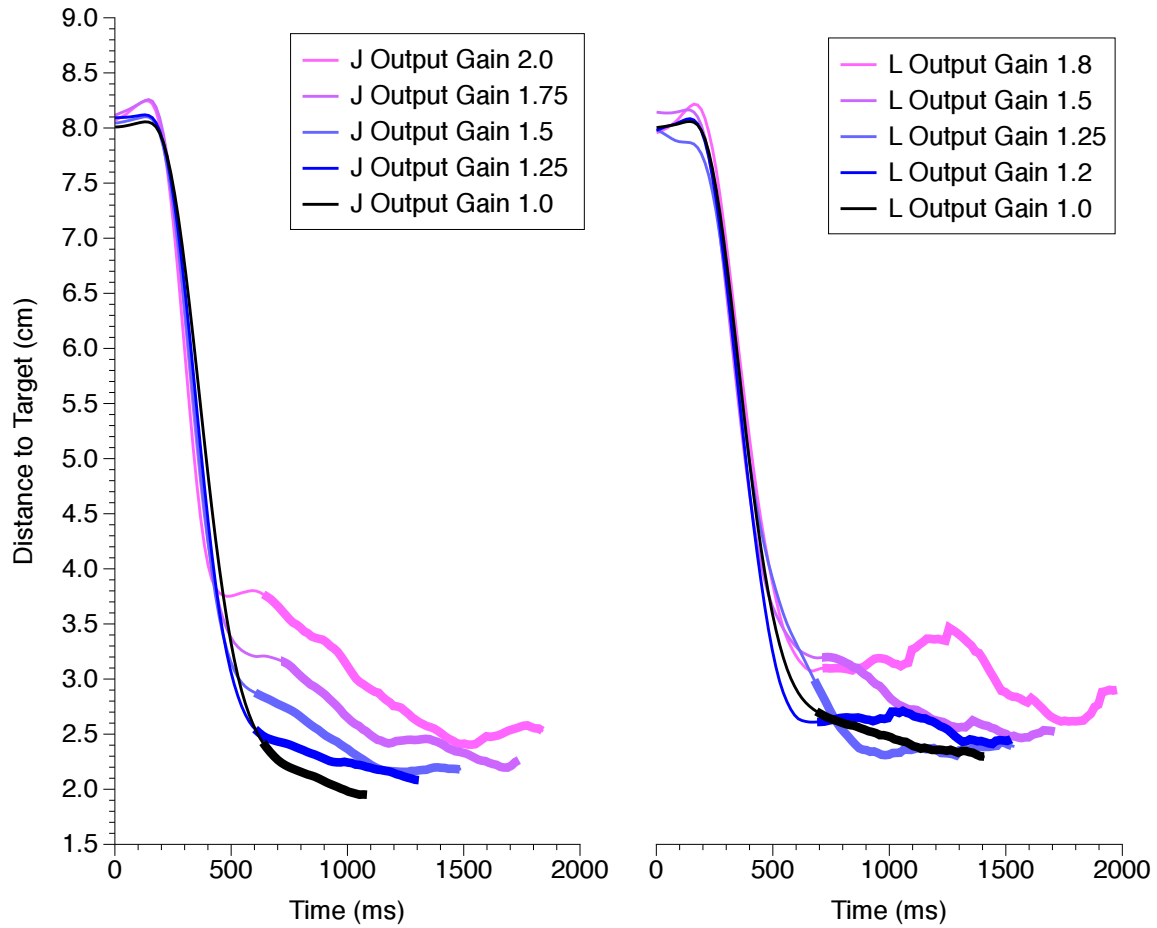
Figure 2: Mean Distance to Target for the VKF as the Output Gain Varies. Right panel - the distance (cm) of the arm to the target at each time point averaged across all trials and reach directions, for monkey J. The thicker line is the duration between the first time the monkey acquired the target and the final time the monkey acquired the target. The average last acquire time, which is the final time point of the thick line, measures how long on average it takes the monkey to complete the task. Gains studied were 1.0, 1.25, 1.5, 1.75, and 2.0. The average last acquire time increases with increased kalman output gain. Right panel - same as left panel, but for monkey L with gains 1.0, 1.2, 1.25, 1.5, and 1.8.